

## CLAIMS

What is claimed is:

- 5 1. A computer device capable of playing DVD films without the need of running an operating system, comprising:

a computer keyboard unit comprising a keyboard controller, a low-voltage differential signal (LVDS) transmitter, wherein the LVDS transmitter has an output end connected to a liquid crystal display (LCD) monitor;

- 10 a DVD-ROM for reading and outputting audio/video DVD data;

a DVD format and image decoder connected to the DVD-ROM through a multiplexer, the DVD format and image decoder having an output end connected to an audio amplifier, which has an output end connected to a speaker, wherein an image processor connects the DVD format and image  
15 decoder with the LVDS transmitter, and wherein the DVD format and image decoder is used to transform the inputted IDE interface signals from the multiplexer into RGB digital signals and analog signals, then, the DVD format and image decoder outputs the RGB digital signals to the image processor, the image processor outputs RGB digital signals to the LVDS  
20 transmitter sends low-voltage differential signals to the LCD monitor for displaying, and wherein the analog signals are sent to the audio amplifier and then to the speaker; and

a DVD control switch disposed on the computer keyboard unit and connected to the power switching module, wherein the power switching module  
25 functions as a controller when the DVD control switch is activated to turn on the

work power of the keyboard controller, the DVD-ROM, the DVD format and image decoder, the multiplexer, the image processor, the LVDS transmitter, the LCD monitor, the audio amplifier, and the speaker.

5     2. The computer device capable of playing DVD films without the need of running an operating system as claimed in claim 1 wherein the computer keyboard unit comprises an inner circuit comprising a central processing unit, which communicates with a north bridge chipset, which is connected with a south bridge chipset and an image-accelerating controller, wherein the south  
10    bridge chipset is connected to the keyboard controller and an audio synthesizer, which is connected to the audio amplifier, wherein the image accelerating controller has an output end connected to the image processor.

3. The computer device capable of playing DVD films without the need of  
15    running an operating system as claimed in claim 1 wherein the computer keyboard unit comprises a computer control switch, and when the computer control switch is on, the DVD-ROM, the DVD format and image decoder, the multiplexer, the image processor, the LVDS transmitter, the LCD monitor, the audio amplifier, the keyboard controller, the speaker, the audio synthesizer, the  
20    south bridge chipset, the north bridge chipset, the central processing unit, and the image accelerating controller are powered by the output voltage of the power switching module, and wherein one can execute an application program through Windows interface.

25    4. A computer device capable of playing DVD films without the need of

running an operating system, comprising:

a computer keyboard unit comprising a keyboard controller, a low-voltage differential signal (LVDS) transmitter, wherein the LVDS transmitter has an output end connected to a liquid crystal display (LCD) monitor;

5 a DVD-ROM for reading and outputting audio/video DVD data;

a DVD format and image decoder connected to the DVD-ROM through a multiplexer, the DVD format and image decoder having an output end connected to an audio amplifier, which has an output end connected to a speaker, wherein an image processor connects the DVD format and image  
10 decoder with the LVDS transmitter, and wherein the DVD format and image decoder is used to transform the inputted IDE interface signals from the multiplexer into RGB digital signals and analog signals, then, the DVD format and image decoder outputs the RGB digital signals to the image processor, the image processor outputs RGB digital signals to the LVDS transmitter, the LVDS  
15 transmitter sends low-voltage differential signals to the LCD monitor for displaying, and wherein the analog signals are sent to the audio amplifier and then to the speaker;

a power switching module connected to the keyboard controller; and

a remote control signal receiver connected to the keyboard controller,  
20 wherein the remote control signal receiver is used to receive remote control signals sent from a remote control to turn on the power switching module, the keyboard controller, the DVD-ROM, the DVD format and image decoder, the multiplexer, the image processor, the LVDS transmitter, the LCD monitor, the audio amplifier, and the speaker.

5. The computer device capable of playing DVD films without the need of running an operating system as claimed in claim 4 wherein the computer keyboard unit comprises an inner circuit comprising a central processing unit, which communicates with a north bridge chipset, which is connected with a south bridge chipset and an image-accelerating controller, wherein the south bridge chipset is connected to the keyboard controller and an audio synthesizer, which is connected to the audio amplifier, wherein the image accelerating controller has an output end connected to the image processor.

6. The computer device capable of playing DVD films without the need of running an operating system as claimed in claim 4 wherein the computer keyboard unit comprises a computer control switch, and when the computer control switch is on, the DVD-ROM, the DVD format and image decoder, the multiplexer, the image processor, the LVDS transmitter, the LCD monitor, the audio amplifier, the keyboard controller, the speaker, the audio synthesizer, the south bridge chipset, the north bridge chipset, the central processing unit, and the image accelerating controller are powered by the output voltage of the power switching module, and wherein one can execute an application program through Windows interface.

20

25